

ABSTRACT OF THE DISCLOSURE

A device, which comprises a surface layer that has incorporated therein at least one radioactive nuclide. The surface layer is a self-assembled layer, particularly an anchored SAM that is selected from the group consisting of monolayers or films anchored by siloxane, thiol, amine or phosphonate. The surface layer may be formed of a radioactive material that has been activated to induce radioactivity therein after its final formation. The device may comprise a chemically functionalized SAM incorporating radionuclides attached at the surface of the device. The device may be a temporary or permanent therapeutic implant, such as a stent.

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